



## Complete Summary

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### GUIDELINE TITLE

American Gastroenterological Association medical position statement: diagnosis and treatment of hemorrhoids.

### BIBLIOGRAPHIC SOURCE(S)

American Gastroenterological Association medical position statement: Diagnosis and treatment of hemorrhoids. Gastroenterology 2004 May;126(5):1461-2.  
[PubMed](#)

### GUIDELINE STATUS

This is the current release of the guideline.

According to the guideline developer, the Clinical Practice Committee meets three times a year to review all American Gastroenterological Association Institute (AGAI) guidelines. This review includes new literature searches of electronic databases followed by expert committee review of new evidence that has emerged since the original publication date.

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## SCOPE

### DISEASE/CONDITION(S)

Hemorrhoids

### GUIDELINE CATEGORY

Diagnosis  
Treatment

## **CLINICAL SPECIALTY**

Family Practice  
Gastroenterology  
Internal Medicine  
Surgery

## **INTENDED USERS**

Physicians

## **GUIDELINE OBJECTIVE(S)**

To provide recommendations for the diagnosis and treatment of hemorrhoids

## **TARGET POPULATION**

- Adult patients presenting with symptoms associated with hemorrhoids
- Adult patients diagnosed with hemorrhoids

## **INTERVENTIONS AND PRACTICES CONSIDERED**

### **Diagnosis**

1. Physical examination to rule out other diagnosis
2. Visual examination with anoscope
3. Sigmoidoscopy for patients with rectal bleeding
4. Colonoscopy or air-contrast barium enema
5. Assessment of risk factors
6. Classification of hemorrhoids (e.g., 1st degree, 2nd degree, 3rd degree)

### **Treatment**

1. Adequate fiber and water intake
2. Topical corticosteroids and analgesics
3. Nonoperative techniques
  - Injection sclerotherapy
  - Diathermy coagulation
  - Bipolar coagulation
  - Infrared coagulation
  - Rubber band ligation
  - Cryotherapy (not currently recommended)
4. Operative techniques
  - Hemorrhoidectomy

## **MAJOR OUTCOMES CONSIDERED**

- Prevalence rates
- Effectiveness of medical treatments
  - Symptom improvement
  - Bleeding rates

- Recurrence
- Patient satisfaction
- Side effects/complications of treatment

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)  
Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

A literature search for all English-language articles dealing with hemorrhoids published from 1990 to 2002 was performed. Databases searched included MEDLINE, PreMEDLINE, the Cochrane Database of Systematic Reviews, the Database of Abstracts of Reviews of Effectiveness, the American College of Physicians Journal Club, and the Cochrane Central Registry of Controlled Trials. Additional references were obtained from the bibliographies of selected articles. Pertinent studies emphasizing randomized controlled trials were selected for review.

### NUMBER OF SOURCE DOCUMENTS

Not stated

### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

### METHODS USED TO ANALYZE THE EVIDENCE

Review

### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

### DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

## **RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS**

Not applicable

## **COST ANALYSIS**

A formal cost analysis was not performed and published cost analyses were not reviewed.

## **METHOD OF GUIDELINE VALIDATION**

Peer Review

## **DESCRIPTION OF METHOD OF GUIDELINE VALIDATION**

The literature review and the recommendations therein were prepared for the American Gastroenterological Association Clinical Practice Committee. The paper was approved by the Committee on January 8, 2004, and by the American Gastroenterological Association (AGA) Governing Board on February 13, 2004.

## **RECOMMENDATIONS**

### **MAJOR RECOMMENDATIONS**

Hemorrhoids are a common affliction in the adult population. Symptoms include bleeding, pain, protrusion, and itching. However, because none of these symptoms are specific for hemorrhoids, the diagnosis should only be made after an appropriate physical examination has ruled out other disorders, such as anal fissure, fistula, or abscess.

Hemorrhoids are optimally visualized using an anoscope. Hemorrhoidal bleeding is bright red and can appear as scanty blood on the toilet paper or copious blood squirting into the toilet bowl. All patients who report rectal bleeding should undergo sigmoidoscopy. The proximal colon should be evaluated by colonoscopy or air-contrast barium enema to assess bleeding that is not typical of hemorrhoids (e.g., dark blood or blood mixed in the feces), guaiac-positive stools, or anemia. The individual patient's risk factors for colorectal cancer (age, family history, or personal history of polyps) should also be considered when deciding on the extent of colonic evaluation.

Internal hemorrhoids are classified according to the symptoms they cause. In the most commonly used classification, first-degree hemorrhoids bleed but do not protrude, second-degree hemorrhoids protrude with defecation but reduce spontaneously, third-degree hemorrhoids protrude and require digital reduction, and fourth-degree hemorrhoids cannot be reduced. External hemorrhoids usually do not cause symptoms unless thrombosis occurs, in which case the patient experiences acute pain.

Treatment of hemorrhoids depends on their severity. Medical therapy is most appropriate for first-degree hemorrhoids. The cornerstone of medical therapy is adequate intake of fiber and water. Topical corticosteroids and analgesics are useful for managing perianal skin irritation due to poor hygiene, mucus discharge, or fecal seepage. Prolonged use of potent corticosteroid preparations may be harmful and should be avoided.

Nonoperative techniques for ablating hemorrhoids include injection sclerotherapy, diathermy coagulation, bipolar coagulation, infrared coagulation, and rubber band ligation. Cryotherapy has a high complication rate and is no longer recommended. Nonoperative techniques are most appropriate for second- and third-degree hemorrhoids but are also indicated when medical treatment of first-degree hemorrhoids has failed. Each of these therapies can be used for outpatients and may be repeated as needed; none require anesthesia. Complications are infrequent and usually minor; however, immunocompromised patients are at an increased risk for severe infection, particularly after rubber band ligation. Choice of individual technique depends in part on the physician's training, experience, and preference. Meta-analyses of nonoperative therapy show that patients who undergo sclerotherapy (used only for first- and second-degree hemorrhoids) have a relatively high relapse rate and that rubber band ligation causes relatively more discomfort than other techniques. However, postbanding pain is usually minor and rubber band ligation is associated with the lowest recurrence rate of the nonoperative techniques.

If diagnosed early, thrombosed external hemorrhoids are best managed by excision under local anesthesia in the office or clinic. Excision is not required for patients whose symptoms are resolving, because the pain associated with hemorrhoidal thrombosis typically resolves after 7–10 days.

Hemorrhoidectomy, the most effective treatment for hemorrhoids, is associated with significantly more pain and complications than nonoperative techniques. Accordingly, surgery should be recommended only for a small minority of patients. Indications for elective hemorrhoidectomy include the following: (1) failure of medical and nonoperative therapy; (2) symptomatic third-degree, fourth-degree, or mixed internal and external hemorrhoids; (3) symptomatic hemorrhoids in the presence of a concomitant anorectal condition that requires surgery; and (4) patient preference, after discussion of treatment options with the referring physician and surgeon. A number of operative techniques are acceptable for hemorrhoidectomy, depending on the surgeon's training, experience, and preference. Manual dilatation of the anus is not recommended, given the associated risk of sphincter injury and incontinence. Laser hemorrhoidectomy has no advantage over hemorrhoidectomy using conventional techniques and is more costly. Stapled hemorrhoidectomy is a relatively new procedure that is associated with significantly less pain than conventional hemorrhoidectomy. Results appear comparable to conventional hemorrhoidectomy, although follow-up is relatively short to date and a small number of serious complications have been reported. Patients with acutely prolapsed, incarcerated, and thrombosed hemorrhoids should undergo either hemorrhoidectomy or excision of the external component with rubber band ligation of the internal hemorrhoids.

## **CLINICAL ALGORITHM(S)**

None provided

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The recommendations are based upon the interpretation and assimilation of scientifically valid research, derived from a comprehensive review of published literature. Ideally, the intent is to provide evidence based upon prospective, randomized placebo-controlled trials; however, when this is not possible the use of experts' consensus may occur.

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

### POTENTIAL BENEFITS

Accurate diagnosis of hemorrhoids and development of an effective treatment plan

### POTENTIAL HARMS

- Prolonged use of potent corticosteroid preparations may be harmful and should be avoided.
- The most common complication of rubber band ligation is pain, which is reported in 5–60% of treated patients.
- Complications are infrequent and usually minor; however, immunocompromised patients are at an increased risk for severe infection, particularly after rubber band ligation.
- Hemorrhoidectomy, the most effective treatment for hemorrhoids, is associated with significantly more pain and complications than nonoperative techniques.

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

The Medical Position Statements (MPS), developed under the aegis of the American Gastroenterological Association (AGA) and its Clinical Practice Committee (CPC), were approved by the AGA Governing Board. The data used to formulate these recommendations are derived from the data available at the time of their creation and may be supplemented and updated as new information is assimilated. These recommendations are intended for adult patients, with the intent of suggesting preferred approaches to specific medical issues or problems. They are based upon the interpretation and assimilation of scientifically valid research, derived from a comprehensive review of published literature. Ideally, the intent is to provide evidence based upon prospective, randomized placebo-controlled trials; however, when this is not possible the use of experts' consensus may occur. The recommendations are intended to apply to healthcare providers of all specialties. It is important to stress that these recommendations should not be construed as a standard of care. The AGA stresses that the final decision

regarding the care of the patient should be made by the physician with a focus on all aspects of the patient's current medical situation.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Getting Better

### IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

American Gastroenterological Association medical position statement: Diagnosis and treatment of hemorrhoids. Gastroenterology 2004 May;126(5):1461-2.  
[PubMed](#)

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2004 May

### GUIDELINE DEVELOPER(S)

American Gastroenterological Association Institute - Medical Specialty Society

### SOURCE(S) OF FUNDING

American Gastroenterological Association Institute

### GUIDELINE COMMITTEE

American Gastroenterological Association Clinical Practice Committee

## **COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE**

Not stated

## **FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST**

Not stated

## **GUIDELINE STATUS**

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## **GUIDELINE AVAILABILITY**

Electronic copies: Available from the [American Gastroenterological Association Institute \(AGAI\) \*Gastroenterology\* journal Web site](#).

Print copies: Available from the American Gastroenterological Association Institute, 4930 Del Ray Avenue, Bethesda, MD 20814.

## **AVAILABILITY OF COMPANION DOCUMENTS**

The following is available:

- R.D. Madoff, J.W. Fleshman. American Gastroenterological Association technical review on the diagnosis and treatment of hemorrhoids. *Gastroenterology*. 2004 May; 126:1463-73.

Electronic copies: Available from the [American Gastroenterological Association Institute \(AGAI\) \*Gastroenterology\* journal Web site](#).

Print copies: Available from the American Gastroenterological Association Institute, 4930 Del Ray Avenue, Bethesda, MD 20814.

## **PATIENT RESOURCES**

None available

## **NGC STATUS**

This NGC summary was completed by ECRI on August 24, 2004.

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